AF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Emad S. Isaac	§	
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Serial No.: 10/760,997	§	
	§	Examiner: Weiskopf, Marie A.
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For: ADAPTIVE ROUTE GUIDANCE	§	Atty. Docket: IS01108TC/FLE/WOL (MOTA:0005)
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January 15, 2007 — Seanelle Dice
Date — Seanelle Dice

APPEAL BRIEF PURSUANT TO 37 C.F.R. §§ 41.31 AND 41.37

This Appeal Brief is being filed in furtherance to the Notice of Appeal mailed on November 9, 2006, and received by the Patent Office on November 13, 2006.

The Commissioner is authorized to charge the requisite fee of $500.00 for the Appeal Brief, and any additional fees which may be required, to the credit card listed on the attached PTO-2038. However, if the PTO-2038 is missing, if the amount listed thereon is insufficient, or if the amount is unable to be charged to the credit card for any other reason, the Commissioner is authorized to charge Deposit Account No. 06-1315; Order No. IS01108TC/FLE (MOTA:0005).

1. REAL PARTY IN INTEREST

The real party in interest is Motorola, Inc., the Assignee of the above-referenced application by virtue of the Assignment to Motorola, Inc., recorded at reel 014908, frame 0688, and dated January 20, 2004. Accordingly, Motorola, Inc. will be directly affected by the Board's decision in the pending appeal.

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2. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any other appeals or interferences related to this Appeal. The undersigned is Appellant's legal representative in this Appeal.

3. STATUS OF CLAIMS

Claims 1-45 are currently pending and under final rejection and, thus, are the subject of this Appeal.

4. STATUS OF AMENDMENTS

All amendments in relation to the claims of the present patent application have been entered, and no amendments have been submitted or entered subsequent to the Response to Final Office Action mailed on October 10, 2006.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates generally to a navigation system for a vehicle and, more particularly, to an adaptive route guidance system that is utilized to learn routes between designated starting and ending points. *See* Application, page 2, lines 5-7. In accordance with one aspect of the present invention, the system provides an improved technique for incorporating an individual's knowledge to determine an optimal route or routes. *See id.*, page 5, lines 1-20. The system allows an operator to define a route, which may be a route that the operator has previously utilized a certain number of times, a route specified by an operator, and/or a route that is based on the operator's and/or another individual's knowledge or experience. *See id.* The navigation system then may present a default route or multiple routes between locations that incorporate the individual's knowledge or preferences in the route selection process. *See id.* Additionally, the system allows the operator to select the preferred route from the multiple routes presented. *See, e.g., id.* at page 17, lines 12-20.

In accordance with another aspect of the present invention, the navigation system may utilize an origination location and a destination location in determining a route. *See id.* With the location information, the navigation system may utilize algorithms or a user defined route to provide an optimal route. *See id.*, page 5, lines 1-20. In providing a route, the navigation system may incorporate data, such as traffic congestion, road construction, accidents or weather conditions, to reflect the current road situations to determine the travel time along a specified route. *See id.* As a result, the navigation system under the present technique may provide the operator with a route selection that utilizes an individual's knowledge in addition to the other parameters that may be used to determine an optimal route. *See id.*

The present application contains six independent claims, namely, claims 1, 7, 12, 18, 25, and 31, which are the subject of this Appeal. The subject matter of these six independent claims is summarized below. Further, the subject matter of dependent claims 15, 27, 34, 35, 36, 38, 40, 42, and 44 is also summarized.

With regard to the aspect of the invention set forth in independent claim 1, discussions of the recited features of claim 1 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a vehicle navigation system (*e.g.*, 10) housed in a vehicle (*e.g.*, 32). *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* page 10, lines 1-7; *see also,* FIGs. 1-2. The navigation system (*e.g.*, 10) includes a signal processor (*e.g.*, 12) having a memory (*e.g.*, 16) and a positioning system (*e.g.*, 22) coupled to the signal processor (*e.g.*, 12). *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* FIG 1. The positioning system (*e.g.*, 22) is configured to determine position data relating to a location of the vehicle. *See, e.g., id.* at page 7, lines 15-20. Further, the navigation system (*e.g.*, 10) includes a program (*e.g.*, 18) stored in the memory (*e.g.*, 16). *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* FIG. 1. The program (*e.g.*, 18) is configured to calculate at least one optimal route (*e.g.*, labeled

"OR" in FIG. 3) based on position data (*e.g.*, labeled "A" in FIG. 3) and destination data (*e.g.*, labeled "B" in FIG. 3); provide the at least one optimal route to an operator (*e.g.*, 126); determine if position data and destination data correspond to an operator preferred route (*e.g.*, 108) stored in the memory (*e.g.*, 16); provide the operator preferred route to the operator (*e.g.*, 126) if the position data and destination data correspond to the operator preferred route; and allow the operator to select the preferred route or the at least one optimal route (*e.g.*, 128). *See, e.g., id.* at page 7, lines 15-24; *see also,* page 13, lines 4-13; *see also*, page 15, lines 19-22; *see also*, page 17, lines 12-20; *see also*, FIGs. 2-4.

With regard to the aspect of the invention set forth in independent claim 7, discussions of the recited features of claim 7 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a system (*e.g.*, 30) including a navigation server (*e.g.*, 34) and a vehicle (*e.g.*, 32) having a navigation system (*e.g.*, 10). *See, e.g., id.* at page 10, lines 1-17; *see also,* FIG. 2. The navigation server (*e.g.*, 34) is adapted to communicate with the navigation system (*e.g.*, 10) via a network (*e.g.*, 42). *See, e.g., id.* The navigation server (*e.g.*, 34) includes a program (*e.g.*, 18). *See, e.g., id.* at page 12, lines 15 through page 13, line 2. The program is adapted to generate an optimal route (*e.g.*, labeled "OR" in FIG. 3) from an origination location (*e.g.*, labeled "A" in FIG. 3) to a destination location (*e.g.*, labeled "B" in FIG. 3); access a client profile stored in a memory (*e.g.*, 36) that is coupled to the navigation server (*e.g.*, 34) to determine whether an operator preferred route is defined (*e.g.*, 108); provide the optimal route and the preferred route to the operator of the vehicle (*e.g.*, 126); and allow the operator to select the preferred route or the optimal route (*e.g.*, 128). *See, e.g., id.* at page 7, lines 15-24; *see also,* page 11, lines 18-24; *see also*, page 13, lines 4-13; *see also*, page 15, lines 19-22; *see also*, page 17, lines 12-20; *see also*, FIGs. 2-4.

With regard to the aspect of the invention set forth in independent claim 12, discussions of the recited features of claim 12 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in

accordance with the present invention relates to a system (*e.g.*, 10) that includes a processor (*e.g.*, 12), a positioning module (*e.g.*, 22), an interface module (*e.g.*, 24), and a routine utilized by the processor (*e.g.*, 18). *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* FIG. 1. The positioning module (*e.g.*, 22) communicates with the processor (*e.g.*, 12) and is configured to determine location data that relates to a location of a device. *See, e.g., id.* at page 7, lines 15-20. The interface module (*e.g.*, 24) is adapted to communicate data to a user of the device. *See, e.g., id.* at page 8, lines 1-11. The routine (*e.g.*, 18) is configured to utilize location data (*e.g.*, labeled "A" in FIG. 3) from the positioning module (*e.g.*, 22); utilize destination data (*e.g.*, labeled "B" in FIG. 3) provided to the interface module (*e.g.*, 24); determine whether the location data and the destination data correspond to a defined route stored in memory (*e.g.*, 108); provide the defined route if the location data and destination data correspond to the defined route (*e.g.*, 126); generate an optimal route; provide the optimal route along with the defined route to an operator (*e.g.*, 126); and allow the operator to select the defined route or the optimal route (*e.g.*, 128). *See, e.g., id.* at page 7, lines 15-24; *see also,* page 8, lines 1-11; *see* also, page 13, lines 4-15; *see also*, page 15, lines 19-22; *see also*, page 17, lines 12-20; *see also*, FIGs. 2-4.

With regard to the aspect of the invention set forth in independent claim 18, discussions of the recited features of claim 18 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a method of operating a navigation system (*e.g.*, 10, 30). *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* page 10, lines 1-17; *see also,* FIGs. 1-4. The method includes receiving a destination location and an origination location (*e.g.*, 104). *See, e.g., id.* at page 7, lines 15-20; *see also,* page 15, lines 9-17; *see also,* FIG. 4. The method further includes determining if the origination location has been utilized with the destination location based on stored data (*e.g.*, 108). *See, e.g., id.* at page 15, lines 19-22, *see also,* FIG. 4. Further, the method includes providing a default route if a default route has been defined in memory (*e.g.*, 126); generating an optimal route; providing an optimal route along with the default route to a user (*e.g.*, 126); and allowing the user to select the default route or the optimal route (*e.g.*, 128). *See,*

e.g., id. at page 13, lines 4-12; *see also,* page 15, lines 19-22; *see also,* page 17, lines 12-20; *see also,* FIGs. 2-4.

With regard to the aspect of the invention set forth in independent claim 25, discussions of the recited features of claim 25 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a method of operating a navigation system (*e.g.*, 10, 30). *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* page 10, lines 1-17; *see also,* FIGs. 1-4. The method includes receiving destination data from a user interface (*e.g.*, 24) of a vehicle (*e.g.*, 32), and receiving origination data. *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* at page 7, lines 15 through page 8, line 11; *see also,* page 15, lines 9-17; *see also,* FIG. 1 and FIG. 4. Further, the method includes communicating the origination data and the destination data to a server (*e.g.*, 34) via a network (*e.g.*, 42) and accessing a client profile (*e.g.*, 36). *See, e.g., id.* at page 11, lines 11-24; *see also,* FIG. 2. The method further includes comparing the client profile with the origination data and the destination data and determining if the origination data and the destination data correspond to a defined route in the client profile that is based on a user's experience and knowledge (*e.g.*, 108). *See, e.g., id.* at page 15, lines 9-22; *see also,* FIG. 4. Further, the method includes generating an optimal route; communicating the optimal route and the user defined route to the user (*e.g.*, 126); and allowing the user to select the user defined route or optimal route (*e.g.*, 128). *See, e.g., id.* at page 13, lines 4-12; *see also,* page 15, lines 19-22; *see also,* page 17, lines 12-20; *see also,* FIGs. 2-4.

With regard to the aspect of the invention set forth in independent claim 31, discussions of the recited features of claim 31 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a method of manufacturing a navigation system (*e.g.*, 10). *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* FIG. 1. The method includes providing a navigation system that includes a processor (*e.g.*, 12) and a memory (*e.g.*, 16). *See, e.g., id.* Further, the method includes coupling a user interface

(*e.g.*, 24) to the processor (*e.g.*, 12) where the user interface (*e.g.*, 24) is configured to enter data from an operator. *See, e.g., id.* at page 8, lines 1-11; *see also,* FIG. 1. The method further includes coupling a positioning module (*e.g.*, 22) to the processor (*e.g.*, 12) where the positioning module (*e.g.*, 22) is configured to determine location data. *See, e.g., id.* at page 7, lines 15-20; *see also,* FIG. 1. Moreover, the method includes coupling a display (*e.g.*, 26) to the processor (*e.g.*, 12) where the display (*e.g.*, 26) is configured to present route data to the operator (*e.g.*, labeled "OR" and "AR" in FIG. 3). *See, e.g., id.* at page 8, lines 1-11; *see also,* FIG. 1. Furthermore, the method includes providing a program (*e.g.*, 18) within the memory (*e.g.*, 16). *See, e.g., id.* at page 5, line 22 through page 6, line 5; *see also,* FIG. 1. The program (*e.g.*, 18) is adapted to receive destination data (*e.g.*, labeled "B" in FIG. 3) from the user interface (*e.g.*, 24); receive origination data (*e.g.*, labeled "A" in FIG. 3) from one of the positioning module (*e.g.*, 22) and the user interface (*e.g.*, 24); present a preferred route if the origination data and the destination data correspond to the preferred route (*e.g.*, 126); generate at least one optimal route; present the optimal route and the preferred route to the operator (*e.g.*, 126); and allow the operator to select the preferred route or the optimal route (*e.g.*, 128). *See, e.g., id.* at page 7, lines 15 through page 8, line 11; *see* also, page 13, lines 4-12; *see also,* page 15, lines 9-22; *see also*, page 17, lines 12-20; *see also*, FIGs. 1-4.

With regard to the aspect of the invention set forth in dependent claim 15, discussions of the recited features of claim 15 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 12, where the interface module utilizes hands-free voice capability. *See, e.g., id.* at page 8, lines 4-7.

With regard to the aspect of the invention set forth in dependent claim 27, discussions of the recited features of claim 27 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the method, as set forth in claim 25, where the method further includes setting the user defined route if a number of times a route is

associated with the origination data and the destination data is greater than or equal to a specific value (*e.g.*, 112). *See, e.g., id.* at page 16, lines 5-15; *see also*, FIG. 4.

With regard to the aspect of the invention set forth in dependent claim 34, discussions of the recited features of claim 34 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the method, as set forth in claim 32, where the method further includes configuring the program to communicate with an external server (*e.g.*, 34–40) to download construction data via the communications module (*e.g.*, 20). *See, e.g., id.* at page 10, lines 9-17; *see also* page 14, lines 12-13; *see also*, FIGs. 1-2.

With regard to the aspect of the invention set forth in dependent claim 35, discussions of the recited features of claim 35 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the vehicle navigation system, as set forth in claim 1, where the program is further configured to allow the operator to enter the preferred route (*e.g.*, 104). *See, e.g., id.* at page 5, lines 1-20; *see also*, page 8, lines 1-4; *see also*, page 9, lines 14-24; *see also,* page 13, line 20 through page 14, line 2; *see also*, page 15, lines 9-12; *see also*, FIG. 4.

With regard to the aspect of the invention set forth in dependent claim 36, discussions of the recited features of claim 36 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 7, wherein the program is further adapted to allow the operator to enter the preferred route (*e.g.*, 104). *See, e.g., id.* at page 5, lines 1-20; *see also*, page 8, lines 1-4; *see also*, page 9, lines 14-24; *see also,* page 13, line 20 through page 14, line 2; *see also*, page 15, lines 9-12; *see also*, FIG. 4.

With regard to the aspect of the invention set forth in dependent claim 38, discussions of the recited features of claim 38 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 12, where the program is further adapted to allow the user to enter the defined route (*e.g.*, 104). *See, e.g., id.* at page 5, lines 1-20; *see also*, page 8, lines 1-4; *see also*, page 9, lines 14-24; *see also,* page 13, line 20 through page 14, line 2; *see also*, page 15, lines 9-12; *see also*, FIG. 4.

With regard to the aspect of the invention set forth in dependent claim 40, discussions of the recited features of claim 40 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the method, as set forth in claim 18, where the method further includes allowing the user to enter the default route (*e.g.*, 104). *See, e.g., id.* at page 5, lines 1-20; *see also*, page 8, lines 1-4; *see also*, page 9, lines 14-24; *see also,* page 13, line 20 through page 14, line 2; *see also*, page 15, lines 9-12; *see also*, FIG. 4.

With regard to the aspect of the invention set forth in dependent claim 42, discussions of the recited features of claim 42 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the method, as set forth in claim 25, where the method further includes allowing the user to enter the defined route (*e.g.*, 104). *See, e.g., id.* at page 5, lines 1-20; *see also*, page 8, lines 1-4; *see also*, page 9, lines 14-24; *see also,* page 13, line 20 through page 14, line 2; *see also*, page 15, lines 9-12; *see also*, FIG. 4.

With regard to the aspect of the invention set forth in dependent claim 44, discussions of the recited features of claim 44 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in

accordance with the present invention relates to the method, as set forth in claim 31, where the program is further adapted to allow the operator to enter the preferred route (*e.g.*, 104). *See, e.g., id.* at page 5, lines 1-20; *see also*, page 8, lines 1-4; *see also*, page 9, lines 14-24; *see also,* page 13, line 20 through page 14, line 2; *see also*, page 15, lines 9-12; *see also*, FIG. 4.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. First Ground of Rejection for Review on Appeal:

Appellant respectfully urges the Board to review and reverse the Examiner's first ground of rejection in which the Examiner rejected claims 1-6, 12-14, 16-22, 23-24, 31-33, 35, 38-41, and 44-45 under 35 U.S.C. § 102(e) as being anticipated by Ohler (U.S. Patent No. 6,961,658, hereinafter "Ohler").

B. Second Ground of Rejection for Review on Appeal:

Appellant respectfully urges the Board to review and reverse the Examiner's second ground of rejection in which the Examiner rejected claims 7-11, 25-30, 36-37, and 42-43 under 35 U.S.C. 103(a) as being unpatentable over Ohler in view of Pu et al. (U.S. Patent No. 6,292,743, hereinafter "Pu").

C. Third Ground of Rejection for Review on Appeal:

Appellant respectfully urges the Board to review and reverse the Examiner's third ground of rejection in which the Examiner rejected dependent claims 15 and 34 under 35 U.S.C. 103(a) as being unpatentable over Ohler in view of Stefan at al. (U.S. Patent No. 6,212,658, hereinafter "Stefan").

7. ARGUMENT

As discussed in detail below, the Examiner has improperly rejected the pending claims. More specifically, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under 35 U.S.C. § 102 and 35 U.S.C. § 103. Accordingly, Appellant respectfully requests full and favorable consideration by the

Board, and reversal of the outstanding rejections. Appellant strongly believes that claims 1-45 are currently in condition for allowance.

A. Ground of Rejection No. 1

1. Legal Precedent

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under Section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). The prior art reference also must show the *identical* invention "*in as complete detail as contained in the ... claim*" to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Appellant may point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

2. Independent Claims 1, 12, 18, and 31

Independent claims 1, 12, 18, and 31 recite, in generally similar language, calculating an optimal route, determining a preferred or default route, providing both routes to the user, *and* allowing the user to select among the routes. Appellant would like to reiterate that Ohler does not disclose *all* of these claimed elements. *See* Response to Office Action filed 4/27/06, pg. 17. Ohler does allow for calculation of an alternative route, and Ohler discloses presenting the alternative route to the user. *See* Ohler, col. 7, lines 18-37. However, Ohler does not disclose presenting a preferred route *and* an optimal route to the use, *and* allowing the user to select among the routes. The Examiner counters this argument by citing Ohler as disclosing that a user "may indicate a selection

of a destination or a travel route." *See* Ohler, col. 2, lines 49-51. Appellant respectfully disagrees with Examiner's interpretation of Ohler in this regard. Ohler is only disclosing that a user may select *either* a destination *or* a travel route, whichever *one* is presented to the user, not select *among* multiple routes that are *all* presented to the user, as recited in independent claim 1, 12, 18 and 32.

Further, Appellant respectfully asserts that Ohler does not disclose additional features of independent claims 1, 12, 18 and 31. For example, each of the above-recited claims includes the use of position data, location data, or origination data, *and* destination data. Specifically, independent claim 1 recites "determine if *position data and destination data correspond to an operator preferred route* stored in the memory; provide the operator preferred route to the operator *if the position data and destination data correspond to the operator preferred route.*" (Emphasis added). Independent claim 12 recites "determine whether *the location data and the destination data correspond to a defined route* stored in memory; provide the *defined route if the location data and destination data correspond to the defined route.*" (Emphasis added). Independent claim 18 recites "determining *if the origination location has been utilized with the destination location* based on stored data." (Emphasis added). Finally, independent claim 31 recites "present a preferred route *if the origination data and the destination data correspond to the preferred route.*" (Emphasis added).

In sharp contrast, Ohler discloses a system that determines if a "routine trip" has began by "comparing current vehicle location or departure time information to routine trip information in database." *See* Ohler col. 4, lines 42-46. The Ohler system does not use "destination data" to determine if a trip is a routine trip, instead relying on current location and departure time data. This is different from the claimed features recited above, which use position data, origination data, or location data, *and* destination data to determine if the trip is a defined or preferred route. For at least this additional reason, Ohler does not disclose the above-recited features of independent claims 1, 12, 18 and 31.

Accordingly, Appellant respectfully asserts that Ohler does not anticipate independent claims 1, 12, 18 and 31, as well as the claims that depend therefrom.

3. Dependent Claims 35, 38, 40, and 44

Again, while Appellant respectfully submits that each of the claims dependent on independent claims 1, 12, 18 and 31 are allowable for reasons set forth above, Appellant would like to specifically address an additional point regarding claims 35 (dependent on claim 1), 38 (dependent on claim 12), 40 (dependent on claim 18), and 44 (dependent on claim 31). Dependent claim 35 recites "wherein *the program is configured to allow the operator to enter the preferred route.*" (Emphasis added). Dependent claim 38 recites "wherein *the program is adapted to allow the user to enter the defined route.*" (Emphasis added). Dependent claim 40 recites "allowing *the user to enter the default route.*" (Emphasis added). Finally, dependent claim 44 recites "wherein *the program is adapted to allow the operator to enter the preferred route.*" (Emphasis added).

In contrast, Ohler discloses a learning mode in which the driver can "designate the trip as a routine trip." *See* Ohler, col. 4, lines 26-30. Alternatively, the user can designate the trip as "either a primary or secondary route." *See* Ohler, col. 4 lines 30-32. The system in Ohler then learns the subsequently traveled route per the user's designation. *See* Ohler, col. 4, lines 23-26. Neither option in Ohler allows the user or operator to enter a route, only to "designate" a given route that has already been calculated as a routine trip or a primary or secondary route. This differs from the above-recited claim features, in which the user or operator can actually *enter* a "preferred route," "default route," or "defined route" directly, without waiting for the system to learn or calculate the route. As such, Ohler does not disclose the claim features of dependent claims 35, 38, 40, and 44. Accordingly, Appellant respectfully requests the allowance of claims 35, 38, 40, and 44.

4. Request Withdrawal of Rejection

In view of these reasons, Appellant respectfully requests that the Board direct the Examiner to withdraw the rejection of claims 1-6, 12-14, 16-22, 23-24, 31-33, 35, 38-41, and 44-45 under 35 U.S.C. 102(e) and to allow the claims.

B. **Ground of Rejection No. 2**

1. Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

2. Independent Claims 7 and 25

Again, Appellant would like to reiterate the previous argument that Ohler does not disclose calculating an optimal route, determining a preferred or defined route, providing both routes to the user, *and* allowing the user to select among the routes. *See* Response to Office Action filed 4/27/06, pg. 17. As discussed above, Appellant

respectfully disagrees with the Examiner's interpretation of Ohler in this regard. Ohler only discloses that a user may select *either* a destination *or* a travel route, not select *among* multiple routes *all of* which are presented to the user, as recited the independent claims.

Further, Appellant respectfully asserts that Ohler does not disclose additional features of independent claim 25. As stated above, the Examiner rejected claim 25 as obvious over the Ohler reference in view of the Pu reference. As discussed above with reference to 35 U.S.C. § 102 and independent claims 1, 12, 18, and 31, the Ohler reference does not disclose the claim feature "determining if *the origination data and the destination data correspond to a defined route* in the client profile that is based on a user's experience and knowledge" as recited in claim 25. (Emphasis added). Appellant respectfully submits that independent claim 25 is allowable, because Pu does not cure the deficiencies of Ohler with regard to claim 25. For at least these reasons claims 7 and 25 are believed to be allowable over the cited references taken alone or in conjunction with each other. Thus, Appellant respectfully requests withdrawal of the rejection of claims 7 and 25, as well as the claims that depend therefrom.

3. Dependent Claims 36 and 42

While Appellant respectfully submits that each of the claims dependent on independent claims 7 and 25 are allowable for reasons set forth above, Appellant would like to specifically address an additional point regarding claims 36 (dependent on claim 7) and 42 (dependent on claim 25). As stated above, the Examiner rejected claims 36 and 42 as obvious over the Ohler reference in view of the Pu reference. As discussed above with reference to 35 U.S.C. § 102 and dependent claims 35, 38, 40, and 44, the Ohler reference does not disclose the claim feature "wherein the program is adapted to *allow the operator to enter the preferred route,*" as recited in claim 36, or "*allowing the user to enter the defined route,*" as recited in claim 42. (Emphasis added). Ohler only discloses learning a route if the user "designates" the trip as a routine trip or a primary or secondary route and does not allow the user to *enter* the route directly. Appellant respectfully submits

that dependent claims 36 and 42 are allowable, because Pu does not cure the deficiencies of Ohler with regard to claims 36 and 42. For at least this reason, claims 36 and 42 are believed to be allowable over the cited references taken alone or in conjunction with each other. Thus, Appellant respectfully requests withdrawal of the rejection of claims 36 and 42.

4. Request Withdrawal of Rejection

In view of these reasons, Appellant respectfully requests that the Board direct the Examiner to withdraw the rejection of claims 7-11, 25-30, 36-37, and 42-43 under 35 U.S.C. 103(a) and to allow the claims.

C. **Ground of Rejection No. 3**

1. Dependent Claims 15 and 34

As discussed above with reference to 35 U.S.C. § 102, the Ohler reference does not disclose "determine whether *the location data and the destination data correspond to a defined route stored* in memory; provide the defined route if *the location data and destination data correspond to the defined route*" as recited in independent claim 12 or "present a preferred route if *the origination data and the destination data correspond to the preferred route*" as recited in independent claim 31. (Emphasis added). Appellant respectfully submits that claim 15 is allowable based on its dependency on claim 12 and claim 34 is allowable based on its dependency on claim 31, because Stefan does not cure the deficiencies of Ohler with regard to claims 12 and 31. For at least these reasons, claims 15 and 34 are believed to be allowable over the cited references taken alone or in conjunction with each other, and Appellant respectfully requests withdrawal of the rejection of claims 15 and 34.

2. Request Withdrawal of Rejection

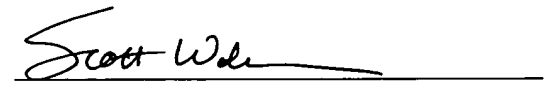
In view of these reasons, Appellant respectfully requests that the Board direct the Examiner to withdraw the rejection of claims 15 and 34 under 35 U.S.C. 103(a) and to allow the claims.

8. Conclusion

Appellant respectfully submits that all pending claims are in condition for allowance. However, if the Examiner or Board wishes to resolve any other issues by way of a telephone conference, the Examiner or Board is kindly invited to contact the undersigned agent at the telephone number indicated below.

Respectfully submitted,

Date: January 15, 2007



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9. APPENDIX OF CLAIMS ON APPEAL

Listing of Claims:

1. A vehicle navigation system, comprising:

a vehicle; and

a navigation system housed in the vehicle, the navigation system comprising:

a signal processor having a memory;

a positioning system coupled to the signal processor, the positioning system configured to determine position data relating to a location of the vehicle; and

a program stored in the memory and configured to:

calculate at least one optimal route based on position data and destination data;

provide the at least one optimal route to an operator;

determine if position data and destination data correspond to an operator preferred route stored in the memory;

provide the operator preferred route to the operator if the position data and destination data correspond to the operator preferred route; and

allow the operator to select the preferred route or the at least one optimal route.

2. The vehicle navigation system, as set forth in claim 1, wherein the program is configured to update the operator preferred route by monitoring the position data.

3. The vehicle navigation system, as set forth in claim 1, wherein the navigation system comprises a user interface configured to facilitate entry of the destination data by a vehicle operator.

4. The vehicle navigation system, as set forth in claim 3, wherein the user interface comprises a keyboard and a display.

5. The vehicle navigation system, as set forth in claim 1, wherein the operator preferred route is defined by the number of times that a specific route is utilized.

6. The vehicle navigation system, as set forth in claim 1, wherein the operator preferred route is defined by the operator based on preferences of the operator.

7. A system, comprising:

a vehicle having a navigation system; and

a navigation server adapted to communicate with the navigation system via a network, the navigation server having a program that is adapted to:

generate an optimal route from an origination location to a destination location;

access a client profile stored in a memory that is coupled to the navigation server to determine whether an operator preferred route-is defined;

provide the optimal route and the preferred route to the operator of the vehicle; and

allow the operator to select the preferred route or the optimal route.

8. The system, as set forth in claim 7, wherein the network comprises a satellite link between the navigation system and the navigation server.

9. The system, as set forth in claim 7, wherein the network comprises a cellular node between the navigation system and the navigation server.

10. The system, as set forth in claim 7, wherein the program interacts with a traffic server to integrate traffic data with the origination location and the destination location to generate the optimal route.

11. The system, as set forth in claim 7, wherein the program interacts with an information server to integrate mapping data with the origination location and the destination location to generate the optimal route.

12. A system, comprising:

a processor;

a positioning module in communication with the processor and configured to

determine location data that relates to a location of a device;

an interface module adapted to communicate data to a user of the device; and

a routine utilized by the processor, the routine configured to:

utilize location data from the positioning module;

utilize destination data provided to the interface module;

determine whether the location data and the destination data correspond to a

defined route stored in memory;

provide the defined route if the location data and destination data correspond

to the defined route;

generate an optimal route;

provide the optimal route along with the defined route to an operator; and

allow the operator to select the defined route or the optimal route.

13. The system, as set forth in claim 12, comprising a communication module that is coupled to the processor and configured to exchange data with a system external to the device.

14. The system, as set forth in claim 13, wherein the routine is further adapted to exchange navigation data and location data via the communication module with the external system via a wireless link.

15. The system, as set forth in claim 12, wherein the interface module utilizes hands-free voice capability.

16. The system, as set forth in claim 12, wherein the interface module comprises a keyboard and display.

17. The system, as set forth in claim 12, wherein the positioning module is a global positioning system.

18. A method of operation of a navigation system, the method comprising the acts of:

receiving a destination location;

receiving an origination location;

determining if the origination location has been utilized with the destination location based on stored data;

providing a default route if a default route has been defined in memory;

generating an optimal route;

providing an optimal route along with the default route to a user; and

allowing the user to select the default route or the optimal route.

19. The method, as set forth in claim 18, comprising setting a default route if a condition is set.

20. The method, as set forth in claim 19, comprising setting the condition if the number of times the origination location has been utilized with the destination location is greater than or equal to a specific number of times.

21. The method, as set forth in claim 19, comprising setting the condition if the user enters that an actual route is a default route.

22. The method, as set forth in claim 18, comprising monitoring an actual route from the origination location to the destination location.

23. The method, as set forth in claim 18, wherein determining further comprises accessing stored data in a database external to the device.

24. The method, as set forth in claim 18, wherein determining further comprises accessing stored data in memory within the device.

25. A method of operation of a navigation system, the method comprising the acts of:

receiving destination data from a user interface of a vehicle;

receiving origination data;

communicating the origination data and the destination data to a server via a network;

accessing a client profile;

comparing the client profile with the origination data and the destination data;

determining if the origination data and the destination data correspond to a defined route in the client profile that is based on a user's experience and knowledge;

generating an optimal route;

communicating the optimal route and the user defined route to the user; and

allowing the user to select the user defined route or optimal route.

26. The method, as set forth in claim 25, comprising presenting the at least one of the optimal route and the user defined route to an operator of the vehicle.

27. The method, as set forth in claim 25, comprising setting the user defined route if a number of times a route is associated with the origination data and the destination data is greater than or equal to a specific value.

28. The method, as set forth in claim 25, wherein communicating comprises utilizing a satellite link between the server and the vehicle.

29. The method, as set forth in claim 25, comprises monitoring an actual route from an origination location that corresponds to the origination data to a destination location that corresponds to the destination data.

30. (original) The method, as set forth in claim 25, wherein generating the optimal route is automatically calculated based on a predefined routine.

31. A method of manufacturing a navigation system comprising the acts of:

providing a navigation system comprising a processor and a memory;

coupling a user interface to the processor, the user interface configured to enter data from an operator;

coupling a positioning module to the processor, the positioning module configured to determine location data;

coupling a display to the processor, the display configured to present route data to the operator; and

providing a program within the memory that is adapted to:

receive destination data from the user interface;

receive origination data from one of the positioning module and the user interface;

present a preferred route if the origination data and the destination data correspond to the preferred route;

generate at least one optimal route;

present the optimal route and the preferred route to the operator; and

allow the operator to select the preferred route or the optimal route.

32. The method, as set forth in claim 31, comprises coupling a communications module to the processor.

33. The method, as set forth in claim 32, comprises configuring the program to communicate with an external server to download traffic data via the communications module.

34. The method, as set forth in claim 32, comprises configuring the program to communicate with an external server to download construction data via the communications module.

35. The vehicle navigation system, as set forth in claim 1, wherein the program is configured to allow the operator to enter the preferred route.

36. The system, as set forth in claim 7, wherein the program is adapted to allow the operator to enter the preferred route.

37. The system, as set forth in claim 7, wherein the program learns the preferred route based on vehicle position information.

38. The system, as set forth in claim 12, wherein the program is adapted to allow the user to enter the defined route.

39. The system, as set forth in claim 12, wherein the program learns the defined route based on vehicle position information.

40. The method, as set forth in claim 18, comprising allowing the user to enter the default route.

41. The method, as set forth in claim 18, comprising learning the default route based on vehicle position information.

42. The method, as set forth in claim 25, comprising allowing the user to enter the defined route.

43. The method, as set forth in claim 25, comprising learning the defined route based on vehicle position information.

44. The method, as set forth in claim 31, wherein the program is adapted to allow the operator to enter the preferred route.

45. The method, as set forth in claim 31, wherein the program is adapted to learn the preferred route based on vehicle position information.

10. EVIDENCE APPENDIX

None.

11. RELATED PROCEEDINGS APPENDIX

None.